REMARKS/ARGUMENTS

Claims 10-13 are pending in the Application. Claims 10-13 are submitted to clearly distinguish patentably over the prior art in their present form, as discussed hereafter. No new matter is involved.

In Paragraph 2 on page 2 of the Office Action, claim 11 is rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,501,172 of Murai, et al. In Paragraph 3 which begins at the bottom of page 2 of the Office Action, claim 13 is rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 5,911,822 of Abe, et al. In Paragraph 5 on page 4 of the Office Action, claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Murai '172 in view of the Wolf, et al. publication. In Paragraph 6 which begins on page 4 of the Office Action, claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Abe, et al. '822 in view of Wolf, et al. These rejections are essentially the same as those set forth in the prior Office Action of May 2, 2005, and are again respectfully traversed.

As previously pointed out by Applicants, this Application is a divisional of Application Serial No. 09/287,199 which issued as U.S. Patent 6,670,036 on December 30, 2003. The '036 Patent is directed to a silicon seed crystal. Claim 1 of the Patent reads as follows:

> 1. A silicon seed crystal which is composed of silicon single crystal and used for the Czochralski method, wherein oxygen concentration in the seed crystal is 12 ppma (JEIDA) or less.

The present Application relates closely to the '036 Patent and defines a method for producing a silicon single crystal with using the seed crystal of the '036 Patent. Indeed, claim 10 in its present form defines a method for producing a silicon single crystal which includes the step of "using a silicon seed crystal wherein oxygen concentration in the seed crystal is 12 ppma (JEIDA) or less" which is the essence of claim 1 of the '036 Patent. Nevertheless, the claims of the present

invention continue to be rejected on prior art similar to that cited during prosecution of the '036 Patent, in spite of the issuance of the '036 Patent.

Consequently, the rejection of claims 10-13 on essentially the same grounds as set forth in the prior Office Action is inconsistent with the issuance of the '036 Patent.

Addressing the Examiner's response to Applicants prior arguments which begins on page 5 of the Final Office Action, Paragraph 7 on page 5 argues that Murai satisfies the claim limitations of the seed crystal in accordance with the present invention. However, that reference does not describe at all the seed crystal that is used in the present invention. The seed crystal used in accordance with the method of claim 11 does not have a straight body portion but rather has a body shape selected from the group consisting of a cone shape, a pyramid shape, and so on. It is the shape as illustrated in Figs. 3 and 4 of this application.

The seed crystal disclosed by Murai (the top portion of the seed 2 of Fig 1 of that reference) has the shape of a prism or cylinder. It is clear from that figure of Murai and from the description at lines 63 and 64 of column 5 of that reference which states "the single crystal grown from the seed 2 having the shape of a prism or cylinder". The "seed taper 3" is asserted in the Office Action to correspond with the portion which is formed with making growth of crystal from the bottom of the seed crystal 2. Therefore, it is clear that the portion is not a seed crystal itself but also a grown-up crystal portion. This is clear from Fig. 1 of Murai and the description at lines 62-65 of column 5 thereof.

Accordingly, it is clear that the seed crystal disclosed by Murai has a straight body portion, and therefore such seed crystal is completely different from the shape of that used in accordance with the present invention which does not have a straight body portion.

Regarding claim 11 of the present Application, it is asserted at lines 8-11 in Paragraph 7 of the Final Office Action that "the prior art teaches the claimed limitation regarding oxygen concentration". However, claim 11 contains no limitation with respect to oxygen concentration.

In the last two lines of page 5 and the first two lines of page 6 of the Final Office Action, the Examiner asserts "Although Abe et al does teach a straight body portion, Abe et al also teaches a non-straight body portion, which is conical; therefore meets the limitation of a seed crystal which does not have a straight body portion". This statement seems highly contradictory. It is clear that the seed crystal disclosed by Murai has a straight body portion. Therefore, such seed crystal is completely different from the shape of the seed crystals used in accordance with the present invention which do not have a straight body portion.

The present invention is defined in terms of a seed crystal which does not have a straight body portion. It is impossible for the seed crystal of Abe et al., which has a straight body portion, to become one which does not have a straight body portion. Even if a part of the shape of the seed crystal is not a straight body portion, the seed crystal of Abe et al. cannot become a seed crystal in accordance with the present invention as long as it has a straight body portion.

In lines 3-7 on page 6 of the Final Office Action, the Examiner states that "Seed crystals are obtained from cutting from a large monocrystalline ingot . . . Therefore, the oxygen concentration of the ingot determines the oxygen concentration of the seed crystal". Certainly, seed crystals are cut from an ingot. However, the cited documents neither show nor suggest using an ingot that has low oxygen concentration for the sake of seed crystals, as in the case of the present invention.

Claims 10-13 are submitted to clearly distinguish patentably over the prior art in their present form. Therefore, reconsideration and allowance are respectfully requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (213) 337-6846 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,
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